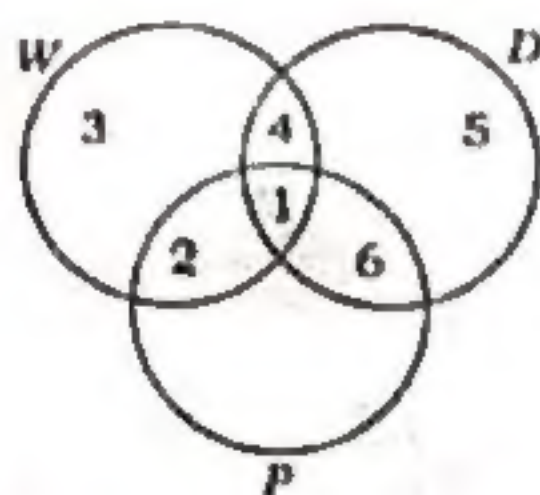


1. In the following diagram, W represents workers, D represents doctors and P represents patients :



Doctors who are patients but not workers will be

- (A) 1
(B) 2
(C) 6
(D) 7

2. Consider the square given below :

4	9	20
8	5	14
10	3	?

Which number should replace '?' in the above square?

- (A) 8
(B) 10
(C) 12
(D) 14

3. Which of the following values is closer to the actual value of π in Mathematics?

- (A) $\frac{21}{7}$
(B) $\frac{22}{7}$
(C) 3.143
(D) 3.1415

4. If all the angles of a triangle are prime numbers, which of the following could be one such angle?

- (A) 89°
(B) 79°
(C) 59°
(D) 29°

5. If a, b, c, d, e and f are in an arithmetic progression (AP), then $(e - c)$ is equal to

- (A) $2(c - a)$
(B) $2(d - c)$
(C) $2(f - d)$
(D) $(d - c)$

$$5 - 3 = 2 \\ e - c$$

6. The average weight of students in a class of 15 boys and 10 girls is 38.4 kg. If the average weight of the boys alone is 40 kg, what is the average weight of the girls?

(A) 36.5 kg

(B) 35 kg

(C) 36 kg

(D) 35.6 kg

7. A person climbs to the top of a 10 m high building and aims at a bird atop a tree which is 17 m away from the person, horizontally. If the line of sight makes an angle of 45° to the horizontal, what is the height of the tree?

(A) 17 m

(B) 27 m

(C) 37 m

(D) 47 m

8. A rectangular area of sides 9 units and 6 units is to be covered by square tiles of sides 1 unit, 2 units and 5 units. The minimum number of tiles needed for this is

(A) 3

(B) 11

(C) 12

(D) 15



9. A merchant buys equal number of shirts and trousers, and pays ₹ 38,000. If the cost of three shirts is ₹ 800 and that of a trouser is ₹ 1,000, how many shirts were bought?

(A) 60

(B) 30

(C) 15

(D) 10

10. Assume that a , b , c and d are four numbers such that the LCM of a and b is b , the LCM of b and c is c , and the LCM of c and d is d . The LCM of a , b , c , d is

(A) $abcd$

(B) bcd

(C) cd

(D) d

Read the following passage carefully and answer Question Nos. 11 and 12 :

History moves fast these days—faster than it did when nineteenth century America began its climb to world power, faster than when Gandhi and Nehru brought India to Independence in the mid-twentieth century. In India, what were once gradual changes—the upswing of economic growth, the movement of Indians from the countryside to the city, the sabotage of the old hierarchies of the social order, the recognition of India's place and status in the world—now turn at dizzying pace. Such historical fast-tracking has taken India to a point where it is now possible to envisage a real change in the chronic conditions of deprivation and injustice that have so long entrapped most Indians. Actually altering those conditions for the better will, however, require a run of political judgment and action as momentous as that accomplished by India's founders in the mid-twentieth century, when that remarkable generation broke India free from an authoritarian, oppressive past and set it forth in pursuit of liberty and democracy.

11. In the passage above, what turns at a dizzying pace?

- (A) India's pace in the world
- (B) Economic growth
- (C) Social mobility
- (D) The course of history

12. What, according to the above passage, depends on political action?

- (A) India's fight for freedom
- (B) Fighting orthodoxy
- (C) Altering conditions of deprivation and injustice
- (D) Social change

Read the following passage carefully and answer Question Nos. 13 and 14 :

In the last one and half centuries or so, since the First War of Independence was fought in 1857—say, the last 90 years British Raj and the first 60 years of India's Independence—the ideas of a freedom and nationalism have combined in ways that one could not have imagined before. Independence was worked for by people more or less at the top. The freedom it brought has worked its way down. People everywhere have ideas now of who they are and what they owe themselves. The process quickened with economic development that came after Independence. What was hidden in the early years of a young nation, or was perhaps only in a state of becoming, has become clearer. The liberation of spirit that has come to India could not come as release alone. In India, with its layer below layer of distress

and cruelty, it had to come as disturbance. It had to come as rage and revolt. India seemed, at least for now, to be a country of a million little mutinies.

The following four inferences are drawn from the above passage. Some of them accurately reflect the spirit of the passage and suggest why India appears to be a country of million mutinies. Read these carefully and answer the question asked :

- I. In the absence of economic freedom, people were unhappy with India's progress.
 - II. Divisions which were not seen in the early years of Independence may have surfaced because people have a better understanding of their identity.
 - III. Unless social inequities are addressed, the search for freedom may counter-productive.
 - IV. There is no difference between foreign rule and self-rule if there is corruption everywhere.
13. Which of the following appears accurate to you, strictly on the basis of the information available in the passage?
- (A) I is incorrect and IV is correct
 - (B) II and III are correct
 - (C) II is correct and III is incorrect
 - (D) I and IV are correct
14. What is the difference between freedom and independence, as seen from the passage above?
- (A) In India's case, freedom is spiritual and independence is political.
 - (B) In India's case, independence from foreign rule was meaningless as there was no economic freedom.
 - (C) India owes her independence to her leaders but the spirit of freedom that followed is seen and felt among the ordinary masses.
 - (D) In India, patriotism is linked to wars against foreign rule.

Read the following passage carefully and answer Question No. 15 :

Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. Providing universal access to quality education is the key to India's continued ascent and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration and cultural preservation.

On the basis of the above passage, the following assumptions have been made :

- I. An equitable and just society is established by educated people.
- II. Education helps in creating national integration and cultural preservation.

15. Which of the above assumptions is/are valid?

- (A) Only I
- (B) Only II
- (C) Both I and II
- (D) Neither I nor II

Read the following passage carefully and answer Question No. 16 :

The ability to read and write, and perform basic operations with numbers is a necessary foundation and indispensable prerequisite for all future schooling and lifelong learning. However, various governmental as well as non-governmental surveys in India indicate that we are currently in a learning crisis! A large population of students currently in elementary school, estimated to be over 5 crore in number, have not attained foundational literacy and numeracy, i.e., the ability to read basic text and the ability to carry out basic addition and subtraction with numerals.

16. Which of the following is the most logical, rational and crucial message conveyed by the above passage?

- (A) Indian students in elementary schools are devoid of basic necessities.
- (B) A large number of students at elementary stage in India do not know the foundational literacy and numeracy.
- (C) Non-governmental surveys are more reliable than governmental surveys.
- (D) There are more than 5 crore students in Indian schools.

Read the following passage carefully and answer Question Nos. 17 and 18 :

Vocabulary is the knowledge of words as well as their meaning and meanings. You need to have a basic familiarity with words and their meanings to perform the four basic skills of listening, speaking, reading and writing. While you can manage with a basic vocabulary to practice the first three skills, it is imperative that you have a good command over words and their usage to be a skilled writer. The skill of writing requires you not only to learn how to use words but what words to use in a required context. It is suggested that good speech requires you to use good words in good order. Good writing, on the other hand, requires that you learn how to use the best words in the best order. To decide on the order of words you need to be sensitive to contexts as well as meaning, not just meaning. That is

why we cannot master the four skills only by learning words from a dictionary. We need to see and hear words in different contexts. Literature provides some of the finest contexts in which words are used.

The following four inferences are drawn from the passage. Read them carefully and answer the question :

- I. To be an expert user of language, you must improve your vocabulary.
- II. Reading literature is the best way to master a language.
- III. Sensitivity to contexts makes us better users of a language.
- IV. Right words in right contexts mark good writing.

17. Choose the answer that fully and correctly represents the information given in the passage.

- (A) III and IV are correct, and I and II are incorrect
- (B) Only II is correct
- (C) I and III are correct
- (D) Only IV is correct

18. Which of the following helps one develop the skill of writing?

- (A) Word power
- (B) Knowledge of contexts
- (C) Knowledge of literary texts
- (D) Sensitivity to meaning, usage and context

Read the following passage carefully and answer Question No. 19 :

Voltaire, the great French thinker, once wrote, "While we were hunter-gatherers, roaming the forests in Europe; India had some of the world's greatest Universities, which attracted students from all over the civilized world to acquire wisdom. It does not behoove us today either to question their antiquity or authenticity."

19. Voltaire, in the above passage, tries to capture

- (A) the great intellectual heritage of India since early days
- (B) the roles of Universities that shape modern sciences
- (C) the supremacy of Europe over India
- (D) nothing in particular

Read the following passage carefully and answer Question No. 20 :

Erosion in America's farmland by wind and water has been a problem since settlers first put up the prairies and grasslands under plow in the 19th century. By the 1930s, more than 282 million acres of farmland were damaged by erosion. After 40 years of conservation efforts, soil erosion has accelerated due to new demands placed on land by heavy crop production. In the years ahead, soil erosion and pollution problems it causes are likely to replace any other problem as the nation's most critical resource problem.

20. The author points out in the above passage that erosion in America
- (A) has damaged 282 million acres of farmland ever since settlers first put the prairies and grasslands under plow
 - (B) has forced people to abandon their settlements
 - (C) can become a more serious problem in the future
 - (D) occurs only in areas with no vegetation

Read the following passage carefully and answer Question No. 21 :

Their diet of meat imposes some major ecological constraints on predators. Even an old or disabled herbivore can prolong its survival by feeding on available forage and survive longer. A vast majority of India's cattle are living examples of this process. On the contrary, a disabled predator, unable to hunt, meets a brutal death from immediate starvation.

21. The above passage implies that
- (A) carnivores, like tiger, would live long after being disabled or badly injured
 - (B) carnivores may change food habit to survive
 - (C) cows and other herbivores will survive longer even after becoming old or injured
 - (D) food and survival have no connection

Read the following passage carefully and answer Question No. 22 :

The Indian Constitution guarantees every citizen the fundamental right to equality. Yet after several years of Independence, the female infant mortality figures, literacy rates and employment opportunities for women are sufficient evidences that discrimination exists. Almost predictably, the gender bias is evident in our political system as well.

22. The issue raised in the above passage reflects badly on
- (A) political system only
 - (B) social behaviour
 - (C) individual behaviour
 - (D) behaviour of a group of people

Read the following passage carefully and answer Question No. 23 :

Greatness is great power, producing great effects. It is not enough that a man has great power in himself; he must show it to the entire world in a way that can't be hid or gainsaid. He must fill up a certain idea in the public mind. I have no other notion of greatness than this two-fold definition, great results springing from great inherent energy. The great in visible objects has relation to that which extends over space. The great in mental ones has to do with space and time. The test of greatness is the page of history. Nothing can be said to be great that has a distinct limit, or that borders on something evidently greater than itself. Besides, what is short-lived and pampered into mere notoriety, is of a gross and vulgar quality in itself.

23. Which one of the following statements is the most rational explanation as expressed by the above passage?

- (A) The power of greatness is always ineffective.
- (B) Inherent energy is inconsequential in matters of greatness.
- (C) History plays an important role in determining greatness.
- (D) Greatness as a quality is never visible in public mind.

Read the following passage carefully and answer Question No. 24 :

What is social is public and what is public is governed by public interest or public well-being. Public good or good for all would be its foundation. Science, therefore, cannot be amoral, unethical or anti-human. Maximum good for minimum number cannot be the founding block of science. Science becomes slave and loses its public character the moment it becomes instrument of few selfish people or societies.

24. Which statement(s) below capture(s) the idea of the above passage properly?

- (A) Science is universal and for entire humanity.
- (B) Science is selective, high-end and not for all.
- (C) Science must be used for social and public good.
- (D) Both (A) and (C)

Read the following passage carefully and answer Question No. 25 :

George Bernard Shaw wrote, "If you have an apple and I have an apple, and we exchange apples, then you and I will still have one apple. But if you have an idea and I have an idea, and we exchange these ideas, then each of us will have two ideas."

25. The basic philosophy inherent in the above quote of George Bernard Shaw can be captured as

- (A) exchange of commodities and products creates a strong economy
- (B) knowledge economy is supreme and the more we accumulate knowledge, the more rich we become
- (C) ideas and opinions must always be shared with all
- (D) All of the above

Read the following passage carefully and answer Question No. 26 :

The school dropout rate in many districts of the country has increased sharply in the last few years, because the parents of these children make them work in the fields owned by landlords to earn some additional money to earn two square meals in the house. In this situation, the remedial action may be

- I. the government should put up a mechanism to provide food grains to the poor people through PDS to encourage them to send their children to school
- II. the government should close down some of these schools and deploy the teachers and students in other nearby schools with sufficient students
- III. the government should issue arrest warrants for all parents who force their children to work in fields

26. Based on the given passage, find the correct choice from the above options.

- (A) Only I
- (B) Only II
- (C) Only III
- (D) None of the above

Read the following passage carefully and answer Question No. 27 :

Perhaps it is only in childhood that books have any deep influence on our lives. In later years, we admire and are entertained, and we may modify some views we already hold, but we are more likely to find in books merely a confirmation of what is in our minds already; as in a love affair it is our own features that we see reflected flatteringly back.

27. The above passage seems to argue that

- (A) childhood is the period of life that is most likely to be influenced by books
- (B) books tend to shatter all our convictions as we grow old
- (C) books are of no use to the adults
- (D) children are most likely to be misled by books

Read the following passage carefully and answer Question No. 28 :

Everyone is sensible that there is more bravery and disdain in subduing an enemy than in cutting his throat; and making him yield, than in putting him to the sword : besides that the appetite of revenge is better satisfied and pleased because its only aim is to make itself felt. And this is the reason why do not fall upon a beast or a stone when they hurt us, because they are not capable of being sensible of our revenge; and to kill a man is to save him from the injury and offence we intend him.

28. Which one of the following is the most logical message conveyed by the above passage?

- (A) The end of revenge is best realized when the enemy in question gets to feel the effect of the revenge.
- (B) It is impossible to take revenge on a beast as it is capable of striking back.
- (C) To kill an enemy is the best form of revenge.
- (D) Subduing an enemy rather than killing is an act of cowardice.

Read the following passage carefully and answer Question No. 29 :

A son should be lovingly reared up to his fourth year; should be educated till he is sixteen. In twenties, he should be employed in some work; he should then be treated affectionately by his father as his equal. Exactly in the same manner, the daughter should be brought up and should be educated with the greatest care. And when she marries, the father ought to give her jewels and wealth.

29. The above passage seems to argue that

- (A) there is no need of showing love to the son once he is four years old
- (B) the girl child should be given equal right to education as the male child
- (C) it is the responsibility of the father to give her wealth at the time of marriage without caring for her education
- (D) when the son is in his twenties, he should discontinue his education

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Read the following passage carefully and answer Question No. 30 :

All sources of energy upon which industry depends are wanted when they are employed and the industry is expending them at a continually increasing rate. Already coal has been largely replaced by oil, and oil is being used up so that the East and the West alike conceive it necessary to their own prosperity to destroy the industry of the other. And what is true of oil is true of other natural resources. Everyday, many units of forest are turned into newspaper, but there are no known processes by which newspaper can be turned into forests.

30. The passage is based on the logic that

- (A) industrialization automatically leads to depletion of all sources of energy
- (B) coal is the only source of energy that is never likely to be exhausted
- (C) industrialization is the only bonding factor between the East and the West
- (D) forests turn into newspapers and vice versa

Read the following passage carefully and answer Question No. 31 :

Cultivated people are like a drop of ink in the ocean. They mix easily and even genially with other drops, for those exclusive days are over, when cultivated people make only cultivated friends, and become tongue-tied or terror-struck in the presence of anyone whose makeup is different from their own. Culture, thank goodness, is no longer a social asset, it can no longer be employed either as a barrier against the mob or as a ladder into aristocracy.

31. Which of the following can be ascertained from the above passage?

- (A) There are plenty of cultivated people who can easily mix up with people from other background.
- (B) Cultivated people are always expected to associate with cultivated people only.
- (C) Culture today can no longer be used as a barrier against the mob or as a ladder into aristocracy.
- (D) Culture is a social asset meant only for a select few.

Read the following passage carefully and answer Question No. 32 :

It must be admitted at once that certain branches of science are almost closed to the amateur. In Chemistry, for example, on human anatomy, the would-be researchers must not only master a great deal of knowledge, but what is far more serious, and indeed almost impossible outside the laboratory, a great deal of technique. The reason for this is fairly simple. There are only ninety known kinds of atom, and only two main types of human body. Each (except half a dozen excessively rare types atom) has been very extensively studied. But several hundred thousand different species of insect and several million different stars

are known; and very little indeed is known in detail about most of them, while all would repay study.

32. Which among the following is the most logical and rational assumption that can be made from the above passage?
- (A) There is a great deal of things to know for a researcher beyond the laboratory experiments.
 - (B) The researcher can learn only from laboratory experiments.
 - (C) Chemistry is the best branch of science.
 - (D) In order to understand human body, the researcher must also know the other species.

Read the following passage carefully and answer Question No. 33 :

We are all aware of certain remarkable discoveries in the medical sciences. For instance, we know about the discovery of vaccines. We can appreciate the prevention of such diseases as smallpox and polio. We also know about many common antibiotics. The knowledge that we can control the spread of syphilis with penicillin and tuberculosis with isoniazid is somewhat comforting. We could, in fact, become lulled into the belief that infectious diseases no longer pose a threat. This, of course, is not true and recent reports in newspapers and medical journals remind us of the various and sometimes 'new' threats of infectious diseases.

33. Which among the following is the most crucial message conveyed by the above passage?
- ☒ (A) Medical science is capable to control any sort of infectious diseases.
 - (B) Common antibiotics can control the spread of infectious diseases.
 - (C) It is established that infectious diseases no longer pose a threat.
 - (D) We are to be always ready for new threats of infectious diseases.

Read the following passage carefully and answer Question No. 34 :

When our childhood has passed and appears to us fascinating because of having away far, we often dwell upon our old remembrances and try to visualize the pictures of childhood through our mental gates. Then we feel surprised to know how little we remember about our early days. They are gone away so far from us without leaving any print behind them. Everything appears to be so dim and our efforts to recollect the events of our childhood do not succeed.

34. The above passage assumes that
- (A) there is glamour around the childhood days
 - (B) in matters pertaining to remembering incidents of childhood, distinctions exist
 - (C) people gradually forget incidents of childhood
 - (D) people have different types of experiences in their childhood

Read the following instructions carefully for Question Nos. 35 and 36 :

Each of the following two items consists of four statements. Of these four statements two cannot be true, but both can be false. Study the statements carefully and identify the statements that satisfy the above conditions. Select the correct answer using the codes given below the each set of statements

35. Examine the following statements and select the correct answer using the codes given below the statements :

- I. All animals are carnivorous.
- II. Some animals are not carnivorous.
- III. Animals are not carnivorous.
- IV. Some animals are carnivorous.

- (A) I and III
- (B) I and II
- (C) II and III
- (D) III and IV

36. Examine the following statements and select the correct answer using the codes given below the statements :

- I. All trains are run by diesel engine
- II. Some trains are run by diesel engine.

- III. No trains are run by diesel engine.
- IV. Some trains are not run by diesel engine.

- (A) I and II
- (B) II and III
- (C) I and III
- (D) I and IV

37. A journey starts from North towards South. Then there are four consecutive left turns. Now the journey is heading towards

- (A) East
- (B) West
- (C) North
- (D) South

38. If it is sunny, I am wet. If I wear a raincoat, I sweat. When it rains, there is no sun, but I am dry; and when there is wind and no sun, my sweat evaporates. In a rainy day, if it is windy and I wear a raincoat, which one of the following statements is most appropriate?

- (A) I am dry.
- (B) I am wet.
- (C) I sweat.
- (D) I sweat and my sweat evaporates.

39. There are four persons in a queue. The front position can be occupied by a female who is graduate. The last position can be occupied by a graduate. The second position cannot be occupied by someone who studies beyond 10th grade. The third position can be occupied by anyone. The minimum number of female graduates in the queue is

(A) 4

(B) 3

(C) 2

(D) 1

40. A candidate attempted 12 questions and secured full marks in all of them. If she obtained 60% in the test and all questions carried equal marks, then what was the total number of questions in the test?

(A) 15

(B) 20

(C) 25

(D) 30

41. A clock is set right at 5:00 a.m. The clock loses 16 minutes in 24 hours. What will be the right time when the clock indicates 10:00 p.m. on the fourth day?

(A) 8:00 p.m.

(B) 9:00 p.m.

(C) 10:00 p.m.

(D) 11:00 p.m.

same as 11

42. Which is greater than 0.5?

(A) 9 divided by 4.5

(B) 4.5 divided by 9

(C) 0.5 multiplied by 0.5

(D) 0.5 multiplied by 0.9

L

43. The weight of a brick is 1 kg. If all the dimensions of the brick are doubled, what will be the weight of the brick?

(A) 2 kg

~~(B) 4 kg~~

(C) 8 kg

(D) 12 kg

44. In a class of 30 students, 17 are good in Mathematics, 19 are good in Science. 2 are neither good in Mathematics nor in Science. How many are good in both Mathematics and Science?

- (A) 2
- (B) 13
- (C) 11
- (D) 8

45. A box contains 5 red balls and 6 blue balls. Balls are drawn one by one from the box. After 5 such draws, at the most how many times there is possibility that the drawn ball is a red one?

- (A) 0
- (B) 5
- (C) 6
- (D) 4

Handwritten diagram showing a box with 5 red balls and 6 blue balls. The number 5 is written next to the red balls and 6 is written next to the blue balls.

46. If a train of length 1 km runs at a speed of 60 km per hour, how much time will it need to cross a bridge of 1 km length?

- (A) 1 minute
- (B) 1.5 minutes
- (C) 2 minutes
- (D) 3 minutes

47. Two statements are given below followed by two conclusions, I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to choose which of the given conclusions, if any, follow(s) only from the given statements.

Statements :

- a. Some horses are domestic animals.
- b. Domestic animals like human contacts.

Conclusions :

- I. Some horses do not like human contacts.
- II. All those who like human contacts are domestic animals.

- (A) Only conclusion I follows from the given statements
- (B) Both conclusions I and II follow from the given statements
- (C) Only conclusion II follows from the given statements
- (D) Neither conclusion I nor II follows from the given statements

48. Select the correct set of mathematical symbols to fit the given equation :

$$5 \ ? \ 0 \ ? \ 3 \ ? \ 5 = 20$$

(A) \times, \times, \times

(B) $-, +, \times$

(C) $\times, +, \times$

(D) $+, -, \times$

49. Arrange the following words according to their positions in an English dictionary :

1. Preach

2. Praise

3. Precinct

4. Precept

(A) 2, 1, 4, 3

(B) 2, 1, 3, 4

(C) 1, 2, 3, 4

(D) 4, 3, 2, 1

50. Read the following symbols carefully and answer the question :

A \rightarrow Multiplication

B \rightarrow Addition

C \rightarrow Subtraction

D \rightarrow Equal to

F \rightarrow Division

Now, if you use the above symbols instead of conventional mathematical ones, identify the correct expression from the following.

(A) $1000 \ F \ 25 \ D \ 30 \ B \ 5 \ A \ 2$

(B) $1000 \ D \ 25 \ C \ 30 \ B \ 5 \ F \ 2$

(C) $1000 \ A \ 25 \ D \ 30 \ F \ 5 \ A \ 2$

(D) $1000 \ F \ 25 \ D \ 30 \ C \ 5 \ A \ 2$

51. The following alphabets are arranged in a logical sequence. Some alphabets are missing in the places shown by '—'. Complete the series by choosing the correct sequence of alphabets from the given options :

a, c, e, —, i, k, —, o, q, —

(A) g, m, s

(D) y, x, w

(C) m, o, q

(D) f, l, r

52. Which of the following series is correctly defined if "Each term of the series should be sum of preceding two terms"?

- (A) 3, 6, 9, 14, 23, 37
- (B) 4, 7, 10, 17, 27, 44
- (C) 5, 8, 13, 21, 35, 56
- (D) 2, 5, 7, 12, 19, 31

53. "Retail inflation is decreasing in the month of March compared to the earlier months."

Which one of the following conclusions can be drawn from the above statement?

- (A) Price of retail products is coming down in the month of March compared to the month of January.
- (B) The rate at which prices of retail products increased in the months of January and February was more than the rate of increase in the month of March.
- (C) Retail price of products is going up continuously over the months.
- (D) Price of retail products is decreasing continuously over the months.

54. Read the following statements carefully and answer the question :

- I. AIDS patients should be allowed to live in our country.
- II. You shall tolerate AIDS patients in your State.
- III. AIDS patients can stay in your neighbourhood.

Which of the following options is correct with respect to these three statements? (Consider the sequence of numbers from I to III as lower to higher)

- (A) Agreeing to a higher statement suggests the agreement to a lower statement
- (B) Agreeing to a lower statement suggests the agreement to a higher statement
- (C) Disagreeing to a lower statement suggests the agreement to a higher statement
- (D) Disagreeing to a higher statement suggests the disagreement to a lower statement

55. Consider the following statements :

- I. Man is mortal.
- II. Rajib is a man.
- III. Rekha is a female.
- IV. Therefore, Rekha is not mortal.

We all know that the conclusion given in IV is wrong. Can you pinpoint the statement(s) given in I, II and III that need(s) to be rewritten to remove the confusion?

- (A) Statement II needs to be rewritten to justify the conclusion in statement IV above
- (B) Both statements II and III need to be rewritten to justify the conclusion in statement IV above
- (C) Both statements I and II need to be changed to justify the conclusion in statement IV above
- (D) Rewriting statement I will be enough to justify the conclusion in statement IV above

56. Which of the following pairs has some similarity with (36 : 216)?

- (A) (4 : 8)
- (B) (16 : 32)
- (C) (25 : 100)
- (D) (9 : 81)

57. Find the next three letters of the series ABE FGJ KLO.

- (A) PQR
- (B) PQT
- (C) PQS
- (D) PST

58. Posts are to be put in a fencing of 63 feet length. The distance between each pair of posts should be 7 feet. There is already a post at one end of the fencing. How many new posts are required?

- (A) 9
- (B) 10
- (C) 8
- (D) 7

59. Sultana wakes up in the morning. She finds that the sun has come up. She goes to a nearby park and starts running towards North. Towards which direction of her will be her own shadow?

- (A) Left
- (B) Right
- (C) Front
- (D) Back

60. Study the following statements :

- I. All stones are hammers.
- II. No hammer is spade.
- III. Some spades are hangers.
- IV. All hangers are wall.

Find the correct option.

- (A) All hammers are stones.
- (B) Stone can be spade.
- (C) All walls are stones.
- (D) Some spades can be wall.

61. Amar can finish solving an exercise in 2 hours, Brinda in 3 hours and Chinmoy in 4 hours. In how many hours will all the three complete 100 exercises, considering that no two work on same exercise?

- (A) 93 hours
- (B) 90 hours
- (C) 96 hours
- (D) 99 hours

[P.T.O.]

62. The average score of John Harris after his 50th innings was 46.4. After 60th innings, John's average score increased by 2.6. What was John's average score in the last 10 innings?

- (A) 122
- (B) 91
- (C) 62
- (D) 49

63. A sum of ₹2,500 is distributed among X, Y and Z in the ratio $\frac{1}{2} : \frac{3}{4} : \frac{5}{6}$. What is the difference between the maximum share and the minimum share?

- (A) ₹300
- (B) ₹350
- (C) ₹400
- (D) ₹450

64. During a festival, Carnival Bazar offers the following discount options on purchases by a customer :

- I. Successive discounts of 10% and 20%, and then pay a service tax of 10%
- II. Successive discounts of 20% and 10%, and then pay a service tax of 10%
- III. Pay a service tax of 10% first and then successive discounts of 20% and 10%

Based on the above options, which would be the best choice for a customer of Carnival Bazar?

- (A) Option I
- (B) Option II
- (C) Option III
- (D) All the options are equally good

65. Each of Angel, Brenda, Colleen and Debbie has \$100. Angel pays \$20 to Brenda, who pays \$10 to Colleen, who gets \$30 from Debbie. At this point, which of the following statements is not correct?

- (A) Colleen is the richest.
- (B) Debbie is the poorest.
- (C) Colleen has more than what Angel and Debbie has together.
- (D) Brenda is richer than Debbie.

66. In Malgudi, 45% population read Malgudi Times, 55% read Malgudi Express, 40% read Malgudi Herald, 30% read Malgudi Times and Malgudi Express, 15% read Malgudi Express and Malgudi Herald, 25% read Malgudi Times and Malgudi Herald; and 10% read all the three newspapers. What percentage does not read any newspaper?

- (A) 10%
- (B) 15%
- (C) 20%
- (D) 25%

67. What would come next in the series given below?

225, 7Y7, 14X9, 23W11, 34V13, ?

- (A) 47U15
- (B) 47V14
- (C) 45U15
- (D) 27U24

68. Select the word from the following, which cannot be formed using the letters from 'Threatened'.

- (A) Heart
- (B) Detain
- (C) Treat
- (D) Heated

69. A student buys a book from an online shop at 20% discount. Her friend buys the same book in a book fair for ₹192 paying 20% less than her friend. What is the actual price of the book?

- (A) ₹275
- (B) ₹300
- (C) ₹320
- (D) ₹392

70. Continue the following sequence :

2, 5, 10, 17, 28, 41, —, —, —

- (A) 58, 77, 100
- (B) 64, 81, 100
- (C) 43, 47, 53
- (D) 55, 89, 113

71. The weights (in kg) of 13 persons are given below :

70, 72, 74, 76, 78, 80, 82,
84, 86, 88, 90, 92, 94

Two new persons having weights 100 kg and 79 kg join the group. The average weight of the group will be increased by

- (A) 0 kg
- (B) 1 kg
- (C) 1.6 kg
- (D) 1.8 kg

72. If air is called water, water is called brown, brown is called dust, dust is called green and green is called cloud, then in which of the following do fishes live?

- (A) Air
- (B) Water
- (C) Brown
- (D) Dust

73. If 17th March, 2018 is Saturday, which day is 5th October, 2020?

- (A) Monday
- (B) Saturday
- (C) Sunday
- (D) Tuesday

74. The price of consumer commodity increases by 25%. By what percentage should a household reduce its consumption so that the budget remains the same?

- (A) 24%
- (B) 20%
- (C) 18%
- (D) 15%

75. Before the start of a meeting, every member present shakes hand with every other member exactly once. If the total count of handshakes is 66, then the number of members present in the meeting is

- (A) 44
- (B) 33
- (C) 17
- (D) 12

76. Car A is thrice as fast as car B and car B is one-third as fast as car C. The distance covered by car C in 15 minutes will be covered by car B in

- (A) 15 minutes
- (B) 30 minutes
- (C) 45 minutes
- (D) 60 minutes

77. In five flats, one above the other, stay five professionals. The Professor has to go up to meet the IAS Officer friend. The Doctor is equally friendly to all and has to go up as frequently as go down. The Engineer has to go up to meet his MLA friend above whose flat the Professor's friend stays. From the ground floor to the top floor, in what order do the five professionals stay?

- (A) Engineer, Professor, Doctor, IAS Officer, MLA
- (B) Professor, Engineer, Doctor, IAS Officer, MLA
- (C) IAS Officer, Engineer, Doctor, Professor, MLA
- (D) Professor, Engineer, Doctor, MLA, IAS Officer

78. A school collected ₹3,249 as fees from its students. If the fees paid by each student and the number of students in the school were equal, then the number of students in the school was

- (A) 57
- (B) 53
- (C) 47
- (D) 43

Read the following information carefully and answer Question Nos. 79 and 80 :

Five cities P, Q, R, S and T are connected by different modes of transport as stated below :

P and Q are connected by boat as well as rail.

S and R are connected by bus and boat.

Q and T are connected by air only.

P and R are connected by boat only.

T and R are connected by rail and bus.

79. Which mode of transport would help one to reach R starting from Q, but without changing the mode of transport?

- (A) Boat
- (B) Rail
- (C) Bus
- (D) Air

80. If a person visits each of the places starting from P and gets back to P, which of the following places must he visit twice?

- (A) Q
- (B) R
- (C) S
- (D) T